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L5: (23) (amplifier... | US 5255322 A | Tag: S | Doc: 14/23 | "Full" 1/...

DOCUMENT-IDENTIFIER: US 5255322 A  
TITLE: Multi-zone audio distribution amplifier

## DEPR:

FIG. 2 illustrates the back panel 16 connected to an amplifier card 30. The amplifier card 30 includes a printed circuit board 32, with various amplifier components 34 thereon, and an air-cooled finned heat sink 36 attached to the circuit board 32 via bolts 38. The heat sink 36 is used to dissipate heat from the amplifier chip, discussed infra in connection with FIG. 3.

Details Text Image

KWIC

## United States Patent (s)

Patent Number: 5,255,322  
Date of Patent: Oct. 19, 1993

## MULTI-ZONE AUDIO DISTRIBUTION AMPLIFIER

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Appl. No.: 012,687

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Int. Cl. H01R 13/00

U.S. Cl. 361/21; 361/22; 361/23; 361/24

Field of Search 361/21; 361/22; 361/23; 361/24; 361/25; 361/26; 361/27; 361/28; 361/29; 361/30

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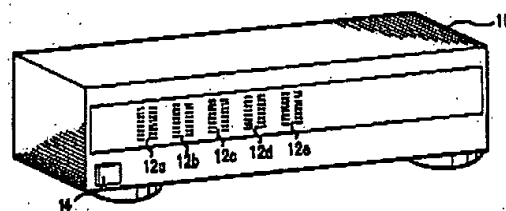
835 Products, Inc.—841 Powerplus V.

Audio Design Associates, Inc.—Primary Dealer  
Edman AB—The Evolution of Thru-Tube Power.  
Primary Dealer—Th. P. N.  
Audio Design Associates—Edward DeLorenzo  
Inventor of PFM—Larry I. Odell; Karen M.  
Data

## ABSTRACT

A multichannel audio distribution amplifier system includes provisions for several master amplifier units which may be used to amplify and distribute amplifier units. The system is enclosed in a housing having a front panel with windows for exposing a set of led display screens on the front side of the housing and may access to the modular units on the rear side of the housing. Each modular amplifier unit includes a printed circuit board for an amplification circuit, a heat sink, and a loop-back port for connecting the amplifier units. An interface board includes support for the display and signal-to-noise or recognition for receiving each printed circuit board and for providing power to each of the amplifier units. Each amplifier unit is operable in dependence of the system, and the desired amplification may be selected by electrically connecting the amplifier units via the loop-back ports.

30 Claims, 4 Drawing Sheets



Details Text Image

Full

DOCUMENT-IDENTIFIER: US 5339461 A

TITLE: Compact radio frequency receiver having take-up  
spool housed earphone  
conductors

DEPR:

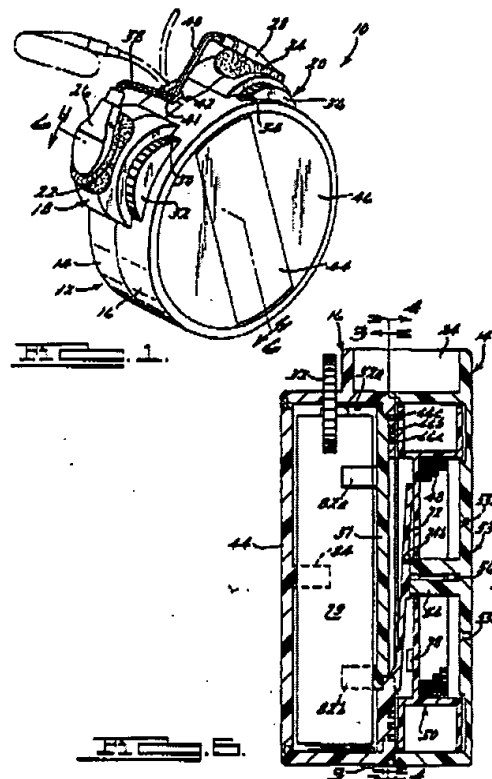
With still further reference to FIG. 2, the printed circuit board 51 of the present invention 10 can be seen to fit nestably within the ratchet housing section 16 against outer surface 70. The printed circuit board 51 includes an FM stereo receiver/amplifier circuit 51a mounted thereon, which generally comprises an FM stereo receiver chip 51a-1, an FM stereo decoder chip 51a-2 and an audio amplifier chip 51a-3. These components are available from the Philips Corporation under part numbers TDA7021T, TDA704T0 and TDA705T0 respectively. The printed circuit board 51 further includes a notched portion 80 which fits over the base portion 72a of the ratchet arm 72 when assembled within the ratchet housing section 16.

U.S. Patent

Aug. 16, 1994

Sheet 1 of 6

5,339,461





It is another object of the invention to provide a vertical-cavity surface-emitting laser which utilizes the oxide -formed aperture.

US06567594A

(11) Patent Number:	6,075,804
(45) Date of Patent:	Jun. 13, 2000

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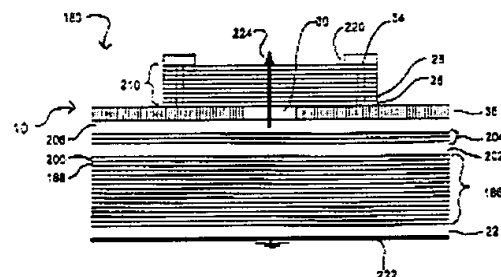
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 Assistant Examiner—Oscar F. Lewis  
 ADDRESS: BUREAU OF FIRE—FIREMEN'S ASSOCIATION

## ABSTRACT

An improved aperture is provided. The aperture comprises, at least, a first layer, the first layer being defined in a laterally extended first region; the first layer being confined within a laterally extended second region, the second region being extended less than the first region; a second layer disposed above the first layer, the second layer being defined less than the first layer and providing parallel to the laterally extended second region and transverse to the aperture, additionally, a masked protruding the aperture is disclosed.

### 10. Finance & Accounting Staff



DOCUMENT-IDENTIFIER: US 6171982 B1  
 TITLE: Method and apparatus for heat-treating an SOI substrate and method of preparing an SOI substrate by using the same

## ORPL:

Y. Hayashi, et al., "Record Low-Threshold Index-Guided In GaAs/GAAlAs Vertical-Cavity Surface-Emitting Laser With A Native Oxide Confinement Structure", Electronics Letters, vol. 31, No. 7, pp. 560-562 (1995).



US 6171982 B1

## United States Patent

(52) Patent No.: US 6,171,982 B1  
 (45) Date of Patent: Jan. 9, 2001

(34) METHOD AND APPARATUS FOR HEAT-TREATING AN SOI SUBSTRATE AND METHOD OF PREPARING AN SOI SUBSTRATE BY USING THE SAME

(73) Inventor: Nobuhito Sato, Sapporo (JP)

(75) Assignee: Canon Kabushiki Kaisha, Tokyo (JP)

(\*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 3 days.

(21) Appl. No.: 09/218,411

(24) Filed: Dec. 13, 1998

(30) Foreign Application Priority Data

Dec. 24, 1997 (JP) ..... 9-307371

(51) Int. Cl.<sup>7</sup> ..... H01L 21/26; H01L 21/30; H01L 21/723

(51) U.S. Cl. .... 438/790; 432/4; 432/5; 432/200

(51) Field of Search .... 438/790; 432/5; 432/4; 432/200

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Primary Examiner—Charles Brown  
 Assistant Examiner—Ruth Kralik  
 (75) Attorney, Agent, or Firm—Pierfrancesco, Cella, Meyer & Smith

## ABSTRACT

An SOI substrate having an SOI surface thereof a single crystal silicon film formed on a substrate is heat-treated in a hydrogen-containing reducing atmosphere in order to smooth the surface and reduce the boron concentration without damaging the film thickness uniformity to a single wafer and across different wafers. The method is characterized in that the single crystal silicon film is arranged opposite to a member of one or more silicon films for heat treatment.

30 Claims, 12 Drawing Sheets

